Remarks

The Office Action mailed June 28, 2005, has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-20 are now pending in this application. Claims 1-20 are rejected. Claims 1, 3, 7, 9, and 14 have been amended. No new matter has been added.

The rejection of Claims 1-20 under 35 U.S.C. § 102(b) as being anticipated by Dobbins et al. (U.S. Patent No. 5,790,546) is respectfully traversed.

Dobbins et al. describe a system including a chassis (30) (column 13, lines 35-40). The chassis is a mechanical enclosure (31), which is used to house a plurality of networking modules (32), which may include repeater modules, bridge modules, router modules, terminal servers, file servers, etc. (column 13, lines 35-40). The chassis provides slots into which the networking modules are inserted (column 13, lines 39-41). In addition to being a mechanical enclosure, the chassis provides a backplane (33) through which the modules inserted into the chassis are provided power from a chassis' power supply (34) and networking connectivity between modules (column 13, lines 41-45). The backplane includes a system management bus (SMB) for network management functions, and a high-speed data bus (column 13, lines 45-48). The system includes a module embodying a secure fast packet switching SPFS switch (40) which is linked to the module's host processor (41) by a pair of port interface links (42) for transfer of data, and a pair of status/control links (43) for transfer of status and control signals (column 13, lines 55-59).

Claim 1 recites a method for forming a network including a plurality of communication devices, a wire network for allowing a plurality of communication transmissions between the communications devices, and at least one connectivity device connected to the wire network, the method comprising the steps of "utilizing the connectivity device to regenerate a communication signal such that the distance between the communications device is extended; utilizing the connectivity device to route communication transmissions by the communications devices through the wire network; and communicating, by a central processing unit located within the

connectivity device, with a network hub device located within the connectivity device, a network repeater device located within the connectivity device, and a network switch device located within the connectivity device, wherein the network repeater device configured to amplify the communication signal to extend the distance between the communications devices, the network hub device interconnects the communication devices by bringing segments of the wire network together, and the network switch device reduces communication collisions by providing communication transmissions from the communications devices with independent paths through the wire network."

Dobbins et al. do not describe or suggest a method for forming a network as recited in Claim 1. Specifically, Dobbins et al. do not describe or suggest communicating, by a central processing unit located within the connectivity device, with a network hub device located within the connectivity device, a network repeater device located within the connectivity device, and a network switch device located within the connectivity device, where the network repeater device configured to amplify the communication signal to extend the distance between the communications devices, the network hub device interconnects the communication devices by bringing segments of the wire network together, and the network switch device reduces communication collisions by providing communication transmissions from the communications devices with independent paths through the wire network. Rather, Dobbins et al. describe linking a module's host processor to a secure fast packet switching SPFS switch for transfer of data. Dobbins et al. further describe using a chassis that is a mechanical enclosure to house a plurality of networking modules, which may include repeater modules, bridge modules, and router modules. Dobbins et al. also describe providing a backplane through which the modules inserted into the chassis are provided power from a chassis' power supply. Dobbins et al. describe including, within the backplane, a system management bus for network management functions. A description of linking a module's host processor to a secure fast packet switch, housing a plurality of repeater modules and bridge modules, and providing a backplane does not describe or suggest communicating, by a central processing unit located within the connectivity device, with a network repeater device also located within the connectivity device, where the network repeater device is configured to

amplify the communication signal. Accordingly, Dobbins et al. do not describe or suggest communicating, by a central processing unit located within the connectivity device, with a network repeater device located within the connectivity device, where the network repeater device configured to amplify the communication signal to extend the distance between the communications devices. For the reasons set forth above, Claim 1 is submitted to be patentable over Dobbins et al.

Claim 2-6 depend from independent Claim 1. When the recitations of Claims 2-6 are considered in combination with the recitations of Claim 1, Applicants submit that Claims 2-6 likewise are patentable over Dobbins et al.

Claim 7 recites a network system comprising "a plurality of communications devices configured to communicate with each other; a wire network configured to interconnect said communications devices and allow a plurality of communication transmissions between said communication devices; a network connectivity device connected to said wire network, said connectivity device comprising a network repeater device and configured to route communication transmissions through said wire network; and a central processing unit located within said network connectivity device and configured to communicate with a network hub device located within said network connectivity device, said network repeater device, and a network switch device located within said network connectivity device, wherein said network repeater device configured to amplify communication transmissions to extend a distance between said communications devices, said network hub device configured to interconnect said communication devices by bringing segments of said wire network together, and said network switch device configured to reduce communication collisions by providing communication transmissions from said communications devices with independent paths through said wire network."

Dobbins et al. do not describe or suggest a network system as recited in Claim 7. Specifically, Dobbins et al. do not describe or suggest the connectivity device including a network repeater device, and a central processing unit located within the network connectivity device and configured to communicate with a network hub device located within the network connectivity device, the network repeater device, and a network switch device located within the network connectivity device, where

the network repeater device configured to amplify communication transmissions to extend a distance between the communications devices, the network hub device configured to interconnect the communication devices by bringing segments of the wire network together, and the network switch device configured to reduce communication collisions by providing communication transmissions from the communications devices with independent paths through the wire network. Rather, Dobbins et al. describe linking a module's host processor to a secure fast packet switching SPFS switch for transfer of data. Dobbins et al. further describe using a chassis that is a mechanical enclosure to house a plurality of networking modules, which may include repeater modules, bridge modules, and router modules. Dobbins et al. also describe providing a backplane through which the modules inserted into the chassis are provided power from a chassis' power supply. Dobbins et al. describe including, within the backplane, a system management bus for network management functions. A description of linking a module's host processor to a secure fast packet switch, housing a plurality of repeater modules and bridge modules, and providing a backplane does not describe or suggest a central processing unit located within the network connectivity device and configured to communicate with the network repeater device also included within the network connectivity device, where the network repeater device is configured to amplify communication transmissions. Accordingly, Dobbins et al. do not describe or suggest a connectivity device including a network repeater device, and a central processing unit located within the network connectivity device and configured to communicate with the network repeater device, where the network repeater device is configured to amplify communication transmissions to extend a distance between the communications devices. For the reasons set forth above, Claim 7 is submitted to be patentable over Dobbins et al.

Claim 8-13 depend from independent Claim 7. When the recitations of Claims 8-13 are considered in combination with the recitations of Claim 7, Applicants submit that Claims 8-13 likewise are patentable over Dobbins et al.

Claim 14 recites a network connectivity device comprising a central processing unit connected to a electronic storage device, a hub module, a switch module, a repeater module and a router module, the connectivity device connected to

a wire network interconnecting a plurality of communication devices, the connectivity device configured to "utilize said router module to route communication transmissions through the wire network, wherein said connectivity device includes a central processing unit configured to communicate with said hub module located within said connectivity device, said repeater module located within said connectivity device, and said switch module located within said connectivity device, said repeater module configured to amplify communication transmissions to extend a distance between the communications devices, said hub module configured to bring segments of the wire network together, and said switch module configured to reduce communication collisions by providing communication transmissions from the communications devices with independent paths through the wire network."

Dobbins et al. do not describe or suggest a network connectivity device as recited in Claim 14. Specifically, Dobbins et al. do not describe or suggest a central processing unit configured to communicate with the hub module located within the connectivity device, the repeater module located within the connectivity device, and the switch module located within the connectivity device, the repeater module configured to amplify communication transmissions to extend a distance between the communications devices, the hub module configured to bring segments of the wire network together, and the switch module configured to reduce communication collisions by providing communication transmissions from the communications devices with independent paths through the wire network. Rather, Dobbins et al. describe linking a module's host processor to a secure fast packet switching SPFS switch for transfer of data. Dobbins et al. further describe using a chassis that is a mechanical enclosure to house a plurality of networking modules, which may include repeater modules, bridge modules, and router modules. Dobbins et al. also describe providing a backplane through which the modules inserted into the chassis are provided power from a chassis' power supply. Dobbins et al. describe including, within the backplane, a system management bus for network management functions. A description of linking a module's host processor to a secure fast packet switch, housing a plurality of repeater modules and bridge modules, and providing a backplane does not describe or suggest a central processing unit configured to communicate with the repeater module located within the connectivity device, where

the repeater module is configured to amplify communication transmissions. Accordingly, Dobbins et al. do not describe or suggest a central processing unit configured to communicate with the repeater module located within the connectivity device, where the repeater module is configured to amplify communication transmissions to extend a distance between the communications devices. For the reasons set forth above, Claim 14 is submitted to be patentable over Dobbins et al.

Claims 15-20 depend from independent Claim 14. When the recitations of Claims 15-20 are considered in combination with the recitations of Claim 14, Applicants submit that dependent Claims 15-20 likewise are patentable over Dobbins et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1-20 be withdrawn.

The rejection of Claims 1, 7, and 14 under 35 U.S.C. § 102(b) as being unpatentable over Picazzo, Jr. et al. (U.S. Patent No. 6,006,275) is respectfully traversed.

Picazzo, Jr. et al. describe a system in which a computer (52) wishes to send a data packet to a computer (54) (column 8, lines 12-13). The data packet would enter a 10BaseT hub/bridge (50) via a twisted pair line (80) and would be automatically repeated on a plurality of repeater ports (56) including a twisted pair line (82) (column 8, lines 13-16).

Claim 1 recites a method for forming a network including a plurality of communication devices, a wire network for allowing a plurality of communication transmissions between the communications devices, and at least one connectivity device connected to the wire network, the method comprising the steps of "utilizing the connectivity device to regenerate a communication signal such that the distance between the communications device is extended; utilizing the connectivity device to route communication transmissions by the communications devices through the wire network; and communicating, by a central processing unit located within the connectivity device, with a network hub device located within the connectivity device, a network repeater device located within the connectivity device, and a

network switch device located within the connectivity device, wherein the network repeater device configured to amplify the communication signal to extend the distance between the communications devices, the network hub device interconnects the communication devices by bringing segments of the wire network together, and the network switch device reduces communication collisions by providing communication transmissions from the communications devices with independent paths through the wire network."

Picazzo, Jr. et al. do not describe or suggest a method for forming a network as recited in Claim 1. Specifically, Picazzo, Jr. et al. do not describe or suggest communicating, by a central processing unit located within the connectivity device, with a network hub device located within the connectivity device, a network repeater device located within the connectivity device, and a network switch device located within the connectivity device, where the network repeater device configured to amplify the communication signal to extend the distance between the communications devices, the network hub device interconnects the communication devices by bringing segments of the wire network together, and the network switch device reduces communication collisions by providing communication transmissions from the communications devices with independent paths through the wire network. Rather, Picazzo, Jr. et al. describe automatically repeating, by a 10BaseT hub/bridge, a data packet that enters the 10BaseT hub/bridge via a twisted pair line. A description of automatically repeating a data packet does not describe or suggest communicating, by a central processing unit located within the connectivity device, with a network repeater device also located within the connectivity device, where the network repeater device is configured to amplify the communication signal. Accordingly, Picazzo, Jr. et al. do not describe or suggest communicating, by a central processing unit located within the connectivity device, with a network repeater device located within the connectivity device, where the network repeater device configured to amplify the communication signal to extend the distance between the communications devices. For the reasons set forth above, Claim 1 is submitted to be patentable over Picazzo, Jr. et al.

Claim 7 recites a network system comprising "a plurality of communications devices configured to communicate with each other; a wire network configured to interconnect said communications devices and allow a plurality of communication transmissions between said communication devices; a network connectivity device connected to said wire network, said connectivity device comprising a network repeater device and configured to route communication transmissions through said wire network; and a central processing unit located within said network connectivity device and configured to communicate with a network hub device located within said network connectivity device, said network repeater device, and a network switch device located within said network connectivity device, wherein said network repeater device configured to amplify communication transmissions to extend a distance between said communications devices, said network hub device configured to interconnect said communication devices by bringing segments of said wire network together, and said network switch device configured to reduce communication collisions by providing communication transmissions from said communications devices with independent paths through said wire network."

Picazzo, Jr. et al. do not describe or suggest a network system as recited in Claim 7. Specifically, Picazzo, Jr. et al. do not describe or suggest the connectivity device including a network repeater device, and a central processing unit located within the network connectivity device and configured to communicate with a network hub device located within the network connectivity device, the network repeater device, and a network switch device located within the network connectivity device, where the network repeater device configured to amplify communication transmissions to extend a distance between the communications devices, the network hub device configured to interconnect the communication devices by bringing segments of the wire network together, and the network switch device configured to reduce communication collisions by providing communication transmissions from the communications devices with independent paths through the wire network. Rather, Picazzo, Jr. et al. describe automatically repeating, by a 10BaseT hub/bridge, a data packet that enters the 10BaseT hub/bridge via a twisted pair line. A description of automatically repeating a data packet does not describe or suggest a central processing unit located within the network connectivity device and configured to communicate

with the network repeater device included within the network connectivity device, where the network repeater device is configured to amplify communication transmissions. Accordingly, Picazzo, Jr. et al. do not describe or suggest the connectivity device including a network repeater device, and a central processing unit located within the network connectivity device and configured to communicate with the network repeater device, where the network repeater device is configured to amplify communication transmissions to extend a distance between the communications devices. For the reasons set forth above, Claim 7 is submitted to be patentable over Picazzo, Jr. et al.

Claim 14 recites a network connectivity device comprising a central processing unit connected to a electronic storage device, a hub module, a switch module, a repeater module and a router module, the connectivity device connected to a wire network interconnecting a plurality of communication devices, the connectivity device configured to "utilize said router module to route communication transmissions through the wire network, wherein said connectivity device includes a central processing unit configured to communicate with said hub module located within said connectivity device, said repeater module located within said connectivity device, and said switch module located within said connectivity device, said repeater module configured to amplify communication transmissions to extend a distance between the communications devices, said hub module configured to bring segments of the wire network together, and said switch module configured to reduce communication collisions by providing communication transmissions from the communications devices with independent paths through the wire network."

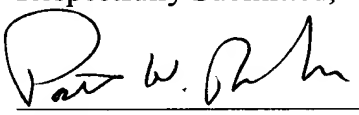
Picazzo, Jr. et al. do not describe or suggest a network connectivity device as recited in Claim 14. Specifically, Picazzo, Jr. et al. do not describe or suggest a central processing unit configured to communicate with the hub module located within the connectivity device, the repeater module located within the connectivity device, and the switch module located within the connectivity device, the repeater module configured to amplify communication transmissions to extend a distance between the communications devices, the hub module configured to bring segments of the wire network together, and the switch module configured to reduce

communication collisions by providing communication transmissions from the communications devices with independent paths through the wire network. Rather, Picazzo, Jr. et al. describe automatically repeating, by a 10BaseT hub/bridge, a data packet that enters the 10BaseT hub/bridge via a twisted pair line. A description of automatically repeating a data packet does not describe or suggest a central processing unit configured to communicate with the repeater module located within the connectivity device, where the repeater module is configured to amplify communication transmissions. Accordingly, Picazzo, Jr. et al. do not describe or suggest a central processing unit configured to communicate with the repeater module located within the connectivity device, where the repeater module is configured to amplify communication transmissions to extend a distance between the communications devices. For the reasons set forth above, Claim 14 is submitted to be patentable over Picazzo, Jr. et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1, 7, and 14 be withdrawn.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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